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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,692

05/05/2006

Stephen D. Horton

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POLYONE CORPORATION
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EXAMINER

NGUYEN, KHANH TUAN

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,692

Applicant(s)

HORTON, STEPHEN D.

Examiner

Khanh T. Nguyen

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10, 12-14, and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Final

Response to Amendment

1. The preliminary amendment filed on 12/27/2007 is entered and acknowledged by the Examiner. Claims 1-5, 7-10, 12-14, and 16-20 are currently pending in the instant application. Claims 6, 11, and 15 have been canceled.

Maintained

2. The objected to the specification for containing embedded hyperlink and/or other form of browser-executable code (i.e. Internet address) is maintained for the reason set forth in the action mailed on 10/09/2007. Applicant should refer to MPEP 608.01(a):

"When a patent application with embedded hyperlinks and/or other forms of browser-executable code issues as a patent (or is published as a patent application publication) and the patent document is placed on the USPTO web page, when the patent document is retrieved and viewed via a web browser, the URL is interpreted as a valid HTML code and it becomes a live web link. When a user clicks on the link with a mouse, the user will be transferred to another web page identified by the URL, if it exists, which could be a commercial web site. USPTO policy does not permit the USPTO to link to any commercial sites since the USPTO exercises no control over the organization, views or accuracy of the information contained on these outside sites."

Withdrawn Objection and/or Rejection

3. The request for a new oath or declaration due to a lack of signature is withdrawn because the oath or declaration filed on 05/05/2006 is in compliance with 37 CFR 1.67(a). The rejection of claims 6 and 15 under 35 U.S.C. 112, second paragraph, as

being indefinite is deemed moot in view of Applicant's cancellation of the instant claims.

The rejection of claims 1-10 and 12-20 under 35 U.S.C. 102(b) as being anticipated by either Geer et al. (U.S. Pub. 2002/0195592 A1) or Viswanathan (U.S. Pat. 6,972,098 B1) is withdrawn in light of Applicant's amendment and/or remark. The rejection of claims 1-4, 7-10, 12, 13 and 16-20 under 35 U.S.C. 102(b) as being anticipated by Silvis et al. (U.S. Pat. 5,629,050) is withdrawn in light of Applicant's amendment and/or remark.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 7-10, 12-14, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Geer et al. (U.S. Pub. 2002/0195592 A1 hereinafter, "Geer") or Viswanathan et al. (U.S. Pat. 6,972,098 B1 hereinafter, "Viswanathan") in view of Lubnine et al. (U.S. Pub. 2003/0195293 hereinafter, "Lubnine").

Geer teaches a coating system including a resin binder, an inherently conductive polymer, metallic particles and a curing agent. The said resin binder may be selected from a water-borne resin system [0011]. In one embodiment, Geer teaches the water-

borne resin may be selected from a polyurethane polymer. Geer further teaches the said inherently conductive polymer may be selected from lignosulfonic acid doped polyaniline [0018], as recited in claims 2, 3, and 12. Geer also teaches adding rheology agents to the dispersion to assist in flowability, hardness and dispersion of a coating system [0145]. The disclosure of a rheology agent is considered readable on the non-ionic thickener and non-ionic anti-settling agent as recited in claims 7, 8, 16, 17, 19, and 20.

Similarly, Viswanathan teaches a coating system utilizing at least one inherently conductive polymer dispersed in a film-forming resin base, wherein the conductive polymer is a polyaniline doped with lignosulfonic acid (Col. 6, lines 41-59), as recited in claims 2, 3, and 12. Viswanathan also teaches a water-borne resin such as polyurethane and acrylic polymer (Col. 7, lines 14-15 and Col. 7, lines 25-28).

Viswanathan further teaches adding a curing agent and additives such as surfactant (i.e. anti-settling agent), catalyst, adhesion promoters and solvent to the coating system (Col. 7, lines 65-67 to Col. 8, lines 1-2). The disclosure of a surfactant is considered readable on a nonionic anti-settling agent, as recited in claims 8, 17, and 20.

Both Geer and Viswanathan references failed to suggest or teach a nonionic water-borne polyurethane polymer.

In an analogous art, Lubnine teaches a coating composition comprising of a breathable polymer (i.e. nonionic water-borne polyurethane) such as polyurethane, wherein the polyurethane polymer may be polymers can be nonionic, anionic, cationic and amphoteric [0115]. Lubnine further teaches nonionic water-borne polyurethane

comprise (a) poly(alkylene oxide) side-chain units in an amount comprising about 12 wt. % to about 80 wt. % of the polyurethane, wherein (i) alkylene oxide groups in said poly(alkylene oxide) side-chain units have from 2 to 10 carbon atoms and are unsubstituted, substituted, or both unsubstituted and substituted, (ii) at least about 50 wt. % of said alkylene oxide groups are ethylene oxide, and (iii) the amount of side-chain units is (i) at least about 30 wt. % when the molecular weight of side-chain units is less than about 600 grams/mole, (ii) at least about 15 wt. % when the molecular weight of side-chain units is from about 600 to about 1,000 grams/mole, and (iii) at least about 12 wt. % when the molecular weight of side-chain units is more than about 1,000 grams/mole, and (b) poly(ethylene oxide) main-chain units in an amount comprising less than about 25 wt. % of the polyurethane (Abstract and [0009]), as recited in claims 4, 5, 13, 14, and 18. Lubnine also teaches adding additional additive such as surfactants and thickeners [0080]. The disclosure of surfactants (dispersing agent) and thickeners are considered readable on nonionic anti-settling agent and nonionic thickener as recited in claims 7, 8, 16, 17, 19, and 20.

Therefore, it would have been obvious to one of ordinary skill in the art to arrive at the claimed coating composition, as recited claims 1, 9, and 10, by substituting the water-borne polyurethane resin of Geer or Viswanathan with a nonionic breathable polyurethane (nonionic water-borne polyurethane) of Lubnine in order to provide water or moisture resistance, luster, and improve spreadability of a coating composition [0091].

Response to Arguments

6. Applicant's arguments with respect to claims 1-5, 7-10, 12-14, and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KTN
01/26/2008



Mark Kopec
Primary Examiner